

Abstract of DE10117939

The surveillance device has at least one camera and a movement detector and/or an acoustic signal source, e.g. a bell, coupled to a device for triggering recording of a sequence of monitored object images in response to a signal from the movement detector and/or the acoustic signal source. A recorded image sequence is transmitted with additional information to a reception station, provided with an image memory and a display device, for viewing the recorded images under control of an operating device.

The invention refers to a device for object monitoring, which contains at least one camera and movement alarm unit or another alarm unit for release of a picture recording

Permanent object monitorings are well-known, with one or more cameras, which are tiltable or rigidly arranged, combined with a long-term video recorder, conceived e.g. for the monitoring of commercial buildings by means of special guard services. Also non-permanent object monitoring with one or more cameras are well-known. As criterion for the activation thereby either a passive IR movement alarm unit or activating a klingeltasters at the entry door serves the camera

With not permanent monitoring effected quasi a "prefiltration" of the information, while a permanently running camera produces a quantity of irrelevant information. This preselection of the information is particularly in the applications important, in which a continuous observation of monitors is by guard services not possible or meaningful. When occurring a relevant event e.g. the inhabitant of a house or a dwelling keeps after the manipulation of the klingeltasters or release of the movement alarm unit by a control monitor a picture from the person in the monitored area. It is unfavorable that with these solutions is assumed when occurring a relevant event of the inhabitants Hauses/der dwelling is also present and the picture on the monitor (e.g. the door intercommunication system) can regard. There can be however interesting and informative to experience, which persons were interested during absence times in the entrance to the building, the house or the dwelling

A solution for it offers a product SANTEC note Cam offered by the company Conrad electronics, with which a picture recording released by a movement alarm unit is made possible. Thereby sequentially up to 1500 pictures with date and time are noted. However also this kind of recording requires still another examination of a multiplicity of pictures

Outgoing of it the invention the task is the basis to indicate a device for object monitoring with which a simplified examination is made possible by picture recordings

This task is solved by a device for object monitoring, which exhibits the characteristics indicated in the requirement 1. Favourable arrangements are indicated in further requirements

With the invention is therefore essentially suggested making an event-controlled picture recording whereby a picture series with a firm number of pictures is taken up in each case. By means of a controller a call of the picture series is possible, whereby a weiterschaltung is possible already to the next series before the conclusion straight regarded series. Thus a rapid examination is made possible for a consequence of picture series

A further description of the invention and their advantages takes place below on the basis a

remark example represented in the design

In Fig. 1 is represented a device for object monitoring. A combination of a movement alarm unit, e.g. a shrub guard with a camera, e.g. a CCD- or a CMOS camera, with or without IR lighting of the area, with a frame memory, which can be supervised, is a control unit, as well as a transmission mechanism for picture transmission shown over a transmission circuit or a network on the right side of the design figure. In place of or additionally to the movement alarm unit also a control of the control unit can take place via a bell contact. On the left side a receipt mechanism is represented, which a memory for picture series, an output signal preparation and an operating sector contains. To the receipt mechanism a display is connectable, which can be e.g. a monitor or a television set. Operating sector can be furnished to cooperate with an infrared remote maintenance

The represented device makes possible, additionally to a direct view possibility of the camera picture of accomplishing a steered recording in each case a picture series with a number given in advance of pictures and if necessary a sound recording similarly the functionality of an automatic answering set for the recording of calls during an absence. Upon return of the inhabitant of the supervised house or the dwelling this can take place itself via playing and/or rendition of the picture sequences and view e.g. on a TV- equipment an overview of during its absence the Zutritte or provide admission attempts. A digital receiver-lateral bildspeicherung is favourable, because thereby the noted pictures can be examined very fast. This is done e.g. via simultaneous rendition of for example 16 pictures - according to the given monitor size - and/or by means of a control function similarly the "skip key" with a CD Player. The device makes possible thus a compression of information by event-controlled recording of a number of pictures, for example 10 to 50 for pictures, storage after the FIFO-principle and the possibility of a rapid "Durchzappens" of the pictures. Continues to exist the possibility, the stored pictures in "synoptic charts" with z. B. to represent 12 pictures per side

The intended digital processing offers beyond that the possibility of working by appropriate compression procedures (JPEG/MPEG) on the transmission circuit between transmitters and receivers with relatively low data rates (= 64 kbit/s) e.g. using DECT a radio module. The coding in terms of software of the data continues to itself offer, if a hearing security of the transferred information is desired

A simple installation into objects already existing is made possible for a radio or a PL transmission by use

A further favourable arrangement of the receipt mechanism is planning a telephone connection. This can over a telefonkabel, or alternatively by the DECT module already mentioned cordless to be made. Thus the additional possibility is offered of querying the stored pictures by tele-call over the InterNet also from outside e.g. with vacation absence.

1. Device for object monitoring, which contains: a) at least one camera, b) a movement alarm unit and/or an acoustic alarm unit, in particular a bell or a similar mechanism steered to the release of an acoustic message, c) a mechanism to the release of a picture recording at the place of the object, by an

output signal of the movement alarm unit or acoustic alarm unit a picture series with a number given in advance of pictures, which can be supervised, seizes, d) a mechanism for the transmission of seized pictures and associated additional information to a slave station, which contains a bit map memory for the digital storage of several picture series and a display, or with such, and e) is connectable an operating sector, which makes possible a steered call of picture series and thus a fast examination of the noted pictures

2. Device according to requirement 1, by the fact characterized that that is operating sector a remote maintenance with infrarotuebertragung or remote transmission
3. Device according to requirement 1 or 2, by the fact characterized that it is furnished to compress the graphic data which can be transmitted so that a transmission is made possible over transmission paths with low transmission rate
4. Device after one of the managing requirements, by the fact characterized that a steered call of individual pictures is made possible for a picture series or by picture overviews of a picture series
5. Device after one of the managing requirements, by the fact characterized that it is furnished to the slave station for a coded transmission of the graphic data
6. Device after one of the managing requirements, by the fact characterized that the picture fig. contain 10 to 50 pictures
7. Device after one of the managing requirements, by the fact characterized that it is furnished to call also before conclusion of the examination of a picture series a next picture series
8. Device after one of the managing requirements, by the fact characterized that the picture series are faraway askable by telephone and/or InterNet
9. Device after one of the managing requirements, by the fact characterized that it is furnished to show several pictures of a picture series together.